

west virginia department of environmental protection

Division of Air Quality 601 57th Street, SE Charleston, WV 25304

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Jim Justice, Governor Austin Caperton, Cabinet Secretary www.dep.wv.gov

ENGINEERING EVALUATION / FACT SHEET

BACKGROUND INFORMATION

Application No.:

G10-D118D

Plant ID No.:

081-00243

Applicant:

Pocahontas Coal Company LLC

Facility Name:

Affinity Preparation Plant

Location:

Midway, Raleigh County, WV

SIC Codes:

1222 (Bituminous Coal & Lignite - Underground)

NAICS Codes:

212112 (Bituminous Coal Underground Mining)

Application Type: Received Date:

Modification March 31, 2017

Engineer Assigned:

Dan Roberts

Fee Amount:

\$1,500

Date Received:

April 3, 2017

Applicant's Ad Date: March 29, 2017

Newspaper:

The Register-Herald

Complete Date:

May 1, 2017

UTM Coordinates:

Easting: 480.0951 km • Northing: 4173.8794 km • NAD83 Zone 17N

Lat/Lon Coordinates: Latitude: 37.711944 • Longitude: -81.225833 • NAD83

Description:

Modification to do the following: add two refuse conveyors BC-22 and BC-23 rated for 400 TPH and 3,504,000 TPY to transfer refuse to a new refuse open storage pile area OS-5; delete raw coal crusher CR-01 rated for 700 TPH and 6,132,000 TPY and the associated transfer points TP-12 and TP-13.

BACKGROUND

Pocahontas Coal Company LLC is currently operating their existing Affinity Preparation Plant under general permit registration G10-D118C, which was approved on February 24, 2016. Pocahontas Coal Company LLC is the owner/operator of the site and is a subsidiary corporation of United Coal Company.

<u>DESCRIPTION OF PROCESS</u> (taken directly from the application)

Raw coal will be received from an adjacent deep mine and transferred to open stockpile OS-01(SW-WS) via belt conveyors BC-01(PE) and BC-02(PE) @ TP-01(TC-FE) thru TP-03(TC-PE). A dozer will be employed to push material to/from the excess stockpile area identified as OS-03(SW-WS) @ TP-04(UL-MDH) and OS-06(LO-MDH). Incoming truck material will be dumped at TP-05(UL-MDH). Belt conveyor BC-03(PE) will reclaim from OS-01/OS-03 stockpile area @ TP-07(LO-UC) and send coal to the screening building via belt BC-04(PE) @ TP-08(TC-FE) and TP-09(TC-PW). From the scalping screen SS-01(PW), 2x0 coal will transfer directly onto belt BC-06(PE) @ TP-11(TC-PW). Screen rock reject will be sent via chute to refuse belt BC-20(PE) @ TP-10(TC-PW). Belt conveyor BC-06 will feed raw coal silo #1 BS-01(FE) @ TP-14(TC-FE). Silo BS-01 will reclaim underbin to belt BC-09(PE) @ TP-15(LO-UC). Belt BC-09 will transfer to the wet wash plant @ TP-16(TC-FW).

Clean coal will transfer @ TP-17(TC-FW) to belt BC-10(PE); to belt conveyor BC-21(PE) and to the clean coal stockpile OS-02(SW-WS) via belt BC-11(PE) @ TP-18(TC-FE), TP-19(TC-PE), and TP-20(TC-PE).

The stacking tube associated with OS-02 will accommodate 50,000 tons of coal and as the dozer pushes the material out, the excess stockpile will have the potential of storing another 50,000 tons. The excess clean coal area is identified as OS-04(SW-WS) @ TP-21(UL-MDH) and TP-27(LO-MDH).

Belt BC-11 will also transfer clean coal to belt conveyor BC-12(PE) @ TP-22(TC-FE) which will feed the clean coal silo BS-03(FE) @ TP-23 (TC-FE); belt BC-12 will transfer to BC-13(PE) @ TP-24(TC-FE) which will feed BS-04(FE) @ TP-25(TC-FE). Stockpile OS-02/OS-04 will reclaim underpile to belt BC-16(PE) @ TP-28(LO-UC). Silo BS-03 will reclaim underbin @ TP-29(LO-UC) to loadout belt #1 BC-16(PE), while BS-04 will transfer underbin @ TP-30(LO-UC) to belt BC-15(PE) and transfer to belt BC-16 @ TP-31(TC-FE). Coal from loadout belt BC-16 will transfer to loadout belt BC-17(PE) @ TP-32(TC-FE) @ and to the batch weigh system @ TP-33(TC-FE). The batch weigh system consists of the surge bin BS-05(FE) which transfers to the loadout bin BS-06(FE) @ TP-34(TC-FE) and to railcar @ TP-35(LR-TC). Clean coal will load out to truck at TP-26(LO-MDH).

Refuse will transfer from the plant to belt BC-18(PE) @ TP-36(TC-FW), which will transfer to belt BC-20(PE) @ TP-37(TC-FE). Belt BC-20 transfers to the refuse bin BS-07(FE) @ TP-38(TC-FE), which discharge to truck @ TP-39(LO-MDH) for delivery to the disposal area @ TP-40(UL-MDH).

Two new refuse belts will be added to transfer material to another refuse area - belt BC-22(PE) will transfer from the plant to belt BC-23(PE) for discharge to fill area. A dozer will be employed to push material from the stockpile area or material can be loaded to truck for transport to fill area.

The facility shall be modified and operated in accordance with the following equipment and

control device information taken from general permit registration application G10-D118D and any amendments thereto:

D No. Medication Sections	Equip- ment	Reconstruction or	G10-D Applicable Sections ²		Maximum Capacity		Control	Associated Transfer Points		
Section M. 2016 S. and 8 60° Deep Mins Conveyor - receives move coal from the deep min and marries at 0 B-CO2 C. 2010 S. and 8 60° Deep Mins Conveyor - receives and coal from the deep min and marries at 0 B-CO2 C. 2010 S. and 8 60° Tensifer Conveyor - receives and coal from B-CO1 T. 200						ТРУ	Control Device ²	B -Before	ID. No.	Control Device ³
Second C 2010 S 3 3 8 Second S		M 2016								
No. C. 2010 C. 2010 S and S C. 2010 S S and S C. 2010 S S S S S S S S S	BC-01	C 2010	5 and 8	deep mine and transfers it to BC-02	1 '	10,512,000	PE	1		TC-FE TC-FE
OS-01 M 2016 S and 8 Care year C	BC-02		5 and 8	and transfers it to OS-01	1,200	10,512,000	PE		r	TC-FE TC-PE
OS-03	OS-01		5 and 8	capacity, 88,869 ft ² case area and 75' height - receives raw coal from BC-02 via a stacking tube, stores it and then underpile reclaim feeders drop it onto BC-03. Excess raw coal may be pushed between OS-01 and		10,512,000	WS	B B A	TP-03 TP-05 TP-04	TC-PE LO-MDH UL-MDH LO-UC
SC 2010 South C 2010 South C 2010 South South C 2010 South	OS-03		5 and 8	tons capacity, 108,869 ft ² case area and 75' height - receives raw coal from truck and excess raw coal from OS-01 via a dozer. Raw coal may be pushed between OS-03 and OS-01 by a dozer.	600	5,256,000	WS	В	TP-05	UL-MDH UL-MDH LO-MDH
BC-04 M 2016 S and 8 As Screen Feed Conveyor - receives raw coal from BC-04 C 2010 S and 8 As Screen Feed Conveyor - receives raw coal from BC-05 Round Feed Feed Feed Feed Feed Feed Feed Fe	BC-03	C 2010	5 and 8	48" Belt Conveyor - receives raw coal from stockpile OS-01 and transfers it to BC-04	800	7,008,000	PE			LO-UC TC-FE
SS-01 M 2016 C 2010 S and 8 C all sifes is and then transfers the 13 Reg. (Freue to BC-04 and the search of the search	BC-04		5 and 8		800	7,008,000	PE	В	TP-08	TC-FE TC-PW
BC-06 C 2010 S and 8 36° Silo #i Feed Conveyor - receives sized raw coal from SS-01 and transfers it to BS-01 TO-0 C 2010 S and 8 TP-11 TC-0 TC-1 TC-0 TC-1 TC-1 TC-1 TC-0 TC-1 T	SS-01		5 and 8	classifies it and then transfers -the 1 3/8" refuse to BC-	800	7,008,000	PW	B A	TP-09 TP-10	TC-PW TC-PW
Raw Coal Silo - 6,000 tons capacity - receives sized raw coal from BC-06, stores it and then discharges underbin to be coal from BC-06, stores it and then discharges underbin to be coal from BC-06, stores it and then discharges underbin to be coal from BC-06, stores it and then discharges underbin to be coal from BC-07 and the store with the coal from BC-08 and 8 and	BC-06		5 and 8	36" Silo #1 Feed Conveyor - receives sized raw coal	700	6,132,000	PE	В	TP-11	TC-PW
BS-01 and transfers it to the wet wash prep plant	BS-01		5 and 8	Raw Coal Silo - 6,000 tons capacity - receives sized raw coal from BC-06, stores it and then discharges underbin		6,132,000	FE	В	TP-14	TC-FE LO-UC
BC-10 C 2010 5 and 8 36" Clean Coal Transfer Belt - receives clean coal from the wet wash prep plant and transfers it to BC-21 How the wet wash prep plant and transfers it to BC-21 S and 8 36" Clean Coal Transfer Belt - receives clean coal from BC-10 and transfers it to BC-11 BC-21 C 2010 S and 8 36" Clean Coal Transfer Belt - receives clean coal from BC-10 and transfers it to BC-11 BC-11 C 2010 S and 8 36" Clean Coal Transfer Belt - receives clean coal from BC-10 and transfers it to BC-11 BC-21 and transfers it to BC-12 BC-21 and transfers it to BC-12 A TP-20 TC-1 A TP-2	BC-09		5 and 8	36" Plant Feed Conveyor - receives sized raw coal from BS-01 and transfers it to the wet wash prep plant	700	6,132,000	PE			LO-UC TC-FW
BC-21 C 2011 S and 8 BC-21 C 2011 S and 8 BC-21 S and 8 BC-10 and transfers it to BC-11 BC-11 C 2010 S and 8 BC-10 and transfers Belt - receives clean coal from BC-12 and transfers it to BC-11 BC-11 C 2010 S and 8 BC-10 and transfers it to BC-12 BC-12 BC-11 C 2010 S and 8 BC-12 and transfers it to BC-12 BC-13 BC-14 BC-15 BC-16 BC-16 BC-16 BC-16 BC-15 BC-16 BC-16 BC-16 BC-16 BC-16 BC-16 BC-17										10111
BC-21 C 2011 5 and 8 BC-10 and transfer Belt - receives clean coal from BC-11 C 2010 5 and 8 BC-10 and transfers it to BC-11 BC-11 C 2010 5 and 8 BC-10 and transfers Belt - receives clean coal from BC-12 C 2010 S and 8 BC-21 and transfers it to OS-02 or BC-12 C 2010 S and 8 BC-21 and transfers it to BC-10 C 2010 S and 8 C 2010 S a	BC-10	C 2010	5 and 8	36" Clean Coal Transfer Belt - receives clean coal from the wet wash prep plant and transfers it to BC-21	400	3,504,000	PE			TC-FW TC-FE
BC-11 C 2010 5 and 8 36" Clean Coal Transfer Belt - receives clean coal from BC-21 and transfers it to OS-02 or BC-12 400 3,504,000 PE A TP-20 TC-F	BC-21	C 2011	5 and 8	36" Clean Coal Transfer Belt - receives clean coal from BC-10 and transfers it to BC-11	400	3,504,000	PE	В	TP-18	TC-FE
Clean Coal Open Storage Pile - maximum 50,000 tons capacity, 88,869 ft case area and 75' height - receives clean coal from BC-11 via a stacking tube, dozer pushed excess clean coal to and from OS-04, stores it and then underpile reclaim feeders drop it onto BC-16 C 2016	BC-11	C 2010	5 and 8	36" Clean Coal Transfer Belt - receives clean coal from BC-21 and transfers it to OS-02 or BC-12	400	3,504,000	PE	B A	TP-19 TP-20	TC-FE TC-PE
OS-04 C 2016	OS-02		5 and 8	capacity, 88,869 ft ² case area and 75' height - receives clean coal from BC-11 via a stacking tube, dozer pushed excess clean coal to and from OS-04, stores it and then		3,504,000	ws	B B A	TP-20 TP-27 TP-21	TC-PE LO-MDH UL-MDH LO-UC
BS-03 C 2010	OS-04	C 2016	5 and 8	50,000 tons capacity, 88,869 ft ² case area and 75' height receives excess clean coal from OS-02, stores it and hen a dozer pushes it back to OS-02 or it is loaded into	200	1,752,000	WS	Α	TP-27	UL-MDH LO-MDH LO-MDH
BS-03 C 2010 5 and 8 Clean Coal Silo #1 - 10,000 tons capacity - receives clean coal from BC-12, stores it and then discharges underbin to BC-16 S and 8 TP-23 TC-F	BC-12	C 2010	5 and 8	66" Clean Coal Transfer Belt - receives clean coal from 3C-11 and transfers it to BS-03 or BC-13	400	3,504,000	PE	Α	TP-23	TC-FE
BS-04 M 2016 C 2010 S and 8 Clean Coal Silo #2 - 6,000 tons capacity - receives clean coal from BC-13, stores it and then discharges underbin to BC-15 M 2016 S and 8 Clean Coal Reclaim Convevor - receives clean coal from BC-15 M 2016 S and 8 Clean Coal Reclaim Convevor - receives clean coal from BC-15 M 2016 S and 8 Clean Coal Reclaim Convevor - receives clean coal from BC-15 M 2016 S and 8 Clean Coal Reclaim Convevor - receives clean coal from BC-15 M 2016 S and 8 Clean Coal Reclaim Convevor - receives clean coal from BC-15 M 2016 S and 8 Clean Coal Reclaim Convevor - receives clean coal from BC-15 M 2016 S and 8 Clean Coal Reclaim Convevor - receives clean coal from BC-15 M 2016 S and 8 Clean Coal Reclaim Convevor - receives clean coal from BC-15 M 2016 S and 8 Clean Coal Reclaim Convevor - receives clean coal from BC-15 M 2016 S and 8 Clean Coal Reclaim Convevor - receives clean coal from BC-15 M 2016 S and 8 Clean Coal Reclaim Convevor - receives clean coal from BC-15 M 2016 S and 8 Clean Coal Reclaim Convevor - receives clean coal from BC-15 M 2016 S and 8 Clean Coal Reclaim Convevor - receives clean coal from BC-15 M 2016 S and 8 Clean Coal Reclaim Convevor - receives clean coal from BC-15 M 2016 M 201	BS-03	C 2010	5 and 8	lean coal from BC-12, stores it and then discharges		3,504,000	FE	В	TP-23	TC-FE LO-UC
BS-04 M 2016 C 2010 5 and 8 Clean Coal Silo #2 - 6,000 tons capacity - receives clean coal from BC-13, stores it and then discharges underbin to BC-15 M 2016 5 and 8 Go" Clean Coal Reclaim Conveyor - receives clean coal from BC-15 M 2016 5 and 60" Clean Coal Reclaim Conveyor - receives clean coal from BC-15 M 2016 for Clean Coal Reclaim Conveyor - receives clean coal for BC-15 M 2016 for Clean Coal Reclaim Conveyor - receives clean coal for BC-15 M 2016 for Clean Coal Reclaim Conveyor - receives clean coal for BC-15 M 2016 for Clean Coal Reclaim Conveyor - receives clean coal for BC-15 M 2016 for Clean Coal Reclaim Conveyor - receives clean coal for BC-15 M 2016 for BC-15 M 201	3C-13	C 2010	5 and 8	6" Clean Coal Transfer Belt - receives clean coal from 3C-12 and transfers it to BS-04	400	3,504,000	PE			TC-FE
BC.15 M 2016 5 and 8 60" Clean Coal Reclaim Conveyor - receives clean coal	3S-04		5 and 8 c	oal from BC-13, stores it and then discharges underbin		3,504,000	FE	В	TP-25	TC-FE LO-UC
C 2010 From BS-04 and transfers at to DC 16 0,000 3,504,000 PE 7 50 DO OC	BC-15		5 and 8 fi	0" Clean Coal Reclaim Conveyor - receives clean coal com BS-04 and transfers it to BC-16	6,000	3,504,000	PE		TP-30	LO-UC TC-FE

Fact Sheet G10-D118D Pocahontas Coal Company LLC Affinity Preparation Plant

Equip-	Date of Construction.	G10-D		Maxim	um Capacity		Associa	ted Trans	fer Points
ID No.	Reconstruction or Modification ¹	Applicable Sections ²	Description	ТРН	TPY	Control Device 2	Location: B -Before A -After	ID. No.	Control Device ³
BC-16	M 2016 C 2010	5 and 8	60" Clean Coal Loadout Conveyor #1 - receives clean coal from OS-02, BS-03 and BC-15 and transfers it to BC-17	6,000	3,504,000	PE	B B B	TP-28 TP-29 TP-31 TP-32	LO-UC LO-UC TC-FE TC-FE
BC-17	M 2016 C 2010	5 and 8	60" Clean Coal Loadout Conveyor - receives clean coal from BC-16 and transfers it to BS-05	6,000	3,504,000	PE	B A	TP-32 TP-33	TC-FE TC-FE
BS-05	M 2016 C 2010	5 and 8	Batch Weigh Surge Bin - 200 tons capacity - receives clean coal from BC-17, stores it and then transfers it to BS-06	6,000	3,504,000	FE	B A	TP-33 TP-34	TC-FE TC-FE
BS-06	M 2016 C 2010	5 and 8	Batch Weigh Loadout Bin - 150 tons capacity - receives clean coal from BS-05 and then transfers it to railcar	6,000	3,504,000	FE	B A	TP-34 TP-35	TC-FE LR-TC
			Refuse Circuit						
BC-18	M 2016 C 2010	5 and 8	36" Plant Refuse Belt Conveyor - receives refuse from the wet wash prep plant and transfers it to BC-20	400	3,504,000	PE	B A	TP-36 TP-37	TC-FW TC-FE
BC-20	M 2016 C 2010		30" Overland Refuse Belt Conveyor - receives -1 3/8" reject from SS-01 and refuse from BC-18 and transfers it to BS-07	400	3,504,000	PE	B B A	TP-10 TP-37 TP-38	TC-PW TC-FE TC-FE
BS-07	M 2016 C 2010	5 and 8	Refuse Bin - 200 tons capacity - receives refuse from BC-20, stores it and then discharges via chute/gate to truck for transport to the disposal area	400	3,504,000	FE	B A A	TP-38 TP-39 TP-40	TC-FE LO-MDH UL-MDH
BC-22	C 2017		Refuse Belt Conveyor - receives refuse from the wet wash prep plant circuit and transfers it to BC-23	400	3,504,000	PE	B	TP-41 TP-42	TC-FW TC-PE
BC-23	C 2017	J talle 0	Refuse Belt Conveyor - receives refuse from BC-22 and transfers it to OS-05	400	3,504,000	PE	B A	TP-42 TP-43	TC-PE TC-MDH
OS-05	C 2017	5 and 8	Refuse Open Storage Pile - maximum 5,000 tons capacity, 8,869 ft ² base area and 25' height - receives refuse from BC-23, stores it and then a front end-loader loads it into trucks for transport to the refuse disposal area	400	3,504,000	ws	B A	TP-43 TP-44	TC-MDH LO-MDH

In accordance with 40 CFR 60 Subpart Y, coal processing and conveying equipment, coal storage systems, and coal transfer and loading systems constructed, reconstructed, or modified on or before April 28, 2008 shall not discharge gases which exhibit 20 percent opacity or greater. Coal processing and conveying equipment, coal storage systems, and coal transfer and loading systems constructed, reconstructed, or modified after April 28, 2008 shall not discharge gases which exhibit 10 percent opacity or greater. For open storage piles constructed, reconstructed, or modified after May 27, 2009, the permittee shall prepare and operate in accordance with a fugitive coal dust emissions control plan that is appropriate for site conditions.

All registered affected facilities under Class II General Permit G10-D are subject to Sections 1.0, 1.1, 2.0, 3.0 and 4.0.
Control Device Abbreviations: FE - Full Enclosure; FW - Full Enclosure with Water Sprays; PE - Partial Enclosure; PW - Partial Enclosure with Water Sprays; WS - Water Sprays; TC - Telescopic Chute; MDH - Minimize Drop Height; and N - No Control.

<u>DESCRIPTION OF FUGITIVE EMISSIONS</u> (taken directly from the application)

Potential sources of fugitive emissions for this facility include emissions, which are not captured by pollution control equipment and emissions from open stockpiles and vehicular traffic on unpaved haulroads and work areas. The hauroads and work areas will be controlled by water truck in accordance with section E.6.c.i. of the General Permit.

The water truck is equipped with pumps sufficient to maintain haulroads and work areas. The water truck will be operated three times daily, and more as needed in dry periods.

An additive to prevent freezing will be utilized in the winter months when freezing conditions are present.

SITE INSPECTION

On May 14, 2014, John Moneypenny of the DAQ's Compliance and Enforcement Section

Fact Sheet G10-D118D Pocahontas Coal Company LLC Affinity Preparation Plant performed a scheduled partial on-site inspection due to a complaint. Mr. Moneypenny's notes were as follows: "Received a complaint regarding lime dust coming from the refuse impoundment. I met with Kim Reed, foreman. The lime dust (kiln dust) is added to the refuse on the belt line which feeds the refuse piles. The lime soaks up moisture and also increases pH. The dust bin normally used is out of service so the dust has been added manually at the refuse pile via endloader. Dust is minimized with the water truck as it is being added/spread. A new silo is due on site in late May, 2014. Lime application was not being conducted at the time of inspection. CH-2014-0356. Complainant was called back with findings." At the time of the inspection, the facility was found to be operating and in compliance and was given a status code of 30 - In Compliance.

On February 20, 2014, John Moneypenny of the DAQ's Compliance and Enforcement Section performed a scheduled full on-site targeted inspection. Mr. Moneypenny's notes were as follows: "This was also in response to a complaint received from DEP Mining regarding a local citizen, Sherry Vance. I met with Larry Dunn of Mining at Ms. Vance's home prior to conducting the inspection. No conclusive evidence was noted at the home which would pinpoint the source of the alleged coal dust. No problems were noted at the mine. Upon arrival I met with Kim Reed, 683-9097 x 5304. The raw coal stacking tube does not have water sprays available as the General Permit lists, but the moisture content is 9%, so dust is not a problem. I informed Mr. Reed to begin taking VE readings per NSPS Subpart Y.....a dust control plan was submitted and available for review." At the time of the inspection, the facility was found to be operating and in compliance and was given a status code of 30 - In Compliance.

Directions from Charleston, WV, are to take I-64 East/I-77 South to Beckley, take Exit 42 for WV-97/Sophia, merge onto WV16 toward WV-97, turn left onto Midway Road/CR-16/14 old WV-16, turn left onto Affinity Road/CR-1/29 and follow to plant site.

ESTIMATE OF EMISSIONS BY REVIEWING ENGINEER

Fugitive emission calculations for continuous and batch drop operations, transfer points, crushing and screening, storage piles, and paved and unpaved haulroads are based on AP-42 Fifth Edition "Compilation of Air Pollution Emission Factors", Volume 1. Control efficiencies were applied based on "Calculation of Particulate Matter Emission - Coal Preparation Plants and Material Handling Operations." The emission factors for crushing/breaking and screening operations were obtained from the Air Pollution Engineering Manual - Air & Waste Management Association - June 1992. The facility-wide emissions calculations were performed by the applicant's consultant using the DAQ's G10-C Excel Emission Calculation Spreadsheet and were checked for accuracy and completeness by the writer.

The proposed modification will result in a new potential to discharge controlled particulate matter emissions of 75.64 pounds per hour (lb/hour) and 305.78 tons per year (TPY) of particulate matter (PM), of which 27.06 lb/hour and 106.42 TPY will be particulate matter less than 10 microns in diameter (PM $_{10}$). Refer to the following table for a complete summary of the facility's proposed potential to discharge:

- New Facility-wide Emissions Total - Pocahontas Coal Company LLC		rolled nissions	Controlled PM ₁₀ Emissions					
Affinity Preparation Plant	lb/hour	TPY	lb/hour	TPY				
		Fugitive 1	ve Emissions					
Open Storage Pile Emissions	0.52	2.28	0.24	1.07				
Unpaved Haulroad Emissions	48.74	213.63	14.39	63.06				
Paved Haulroad Emissions	0.00	0.00	0.00	0.00				
Fugitive Emissions Total	49.26	215.91	14.63	64.13				
		Point Sour	ce Emissions					
Equipment Emissions	16.00	70.08	7.52	32.94				
Transfer Point Emissions	10.38	19.78	4.91	9.36				
Point Source Emissions Total (PTE)	26.38	89.86	12.43	42.29				
FACILITY EMISSIONS TOTAL	75.64	305.78	27.06	106.42				

REGULATORY APPLICABILITY

NESHAPS and PSD have no applicability to the modified facility. The proposed modification of Pocahontas Coal Company LLC's existing wet wash coal preparation plant is subject to the following state and federal rules:

45CSR5 To Prevent and Control Air Pollution from the Operation of Coal Preparation Plants, Wet wash coal preparation plants and Coal Refuse Disposal Areas

The facility is subject to the requirements of 45CSR5 because it meets the definition of "Coal Preparation Plant" found in subsection 45CSR5.2.4. The facility should be in compliance with Section 3 (less than 20% opacity) and Section 6 (fugitive dust control system and dust control of the premises and access roads) when the particulate matter control methods and devices proposed are in operation.

45CSR13 Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits, and Procedures for Evaluation

The proposed modification is subject to the requirements of 45CSR13 because it will involve the construction of two belt conveyors and one open storage pile, which are defined as affected facilities in 40 CFR 60 Subpart Y. The applicant has submitted an application for a registration to modify. The applicant published a Class I legal advertisement in *The Register-Herald* on March 29, 2017 and submitted the \$500 application fee and \$1,000 application fee.

45CSR16 Standards of Performance for New Stationary Sources 40 CFR 60 Subpart Y: Standards of Performance for Coal Preparation and Processing Plants This facility is subject to 40 CFR 60 Subpart Y because it was modified after October 24, 1974 and processes more than 200 tons of coal per day. The proposed modification includes the construction of two belt conveyors and one open storage pile, which are defined as affected facilities in 40 CFR 60 Subpart Y. Therefore, the proposed modification is subject to 45CSR16, which incorporates by reference 40 CFR 60 Subpart Y - Standards of Performance for Coal Preparation Plants. The facility should be in compliance with Section 254(b) (less than 10% opacity for coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal which was constructed, reconstructed or modified after April 28, 2008) when the particulate matter control methods and devices proposed are in operation.

The owner or operator of an open storage pile, which includes the equipment used in the loading, unloading, and conveying operations of the affected facility, constructed, reconstructed, or modified after May 27, 2009, must prepare and operate in accordance with a submitted fugitive coal dust emissions control plan that is appropriate for the site conditions. The fugitive coal dust emissions control plan must identify and describe the control measures the owner or operator will use to minimize fugitive coal dust emissions from each open storage pile. The plan must be submitted to the Director prior to startup of the new, reconstructed or modified open storage pile.

45CSR30 Requirements for Operating Permits

In accordance with 45CSR30 Major Source Determination, the facility is *not* listed in 45CSR30 subsection 2.26.b as one of the categories of stationary sources which must include fugitive emissions (open storage piles constructed or modified on or before May 27, 2009 and haulroads) when determining whether it is a major stationary source for the purposes of § 302(j) of the Clean Air Act. The facility's potential to emit will be 43.36 TPY for PM₁₀ (open storage piles constructed or modified after May 27, 2009 and point sources combined), which is less than the 45CSR30 threshold of 100 TPY of a regulated air pollutant used to define a major stationary source. Therefore, the facility remains a nonmajor source subject to 45CSR30. The facility is not subject to the permitting requirements of 45CSR30 and is classified as a deferred source.

The proposed modification of Pocahontas Coal Company LLC's existing wet wash coal preparation plant is <u>not</u> subject to the following state and federal rules:

45CSR14 Permits for Construction and Major Modification of Major Stationary Sources of Air Pollution for the Prevention of Significant Deterioration

In accordance with 45CSR14 Major Source Determination, the facility is *not* one of the 100 TPY stationary sources listed under the definition of "Major Stationary Source" in subsection 2.43.a. Therefore, it must have the potential to emit 250 TPY or more of any regulated pollutant to meet the definition of a major source in subsection 2.43.b. At the end of subsection 2.4.3, this facility is not listed in Table 1 - Source Categories Which Must Include Fugitive Emissions. So, fugitive emissions (from open storage piles constructed or modified

on or before May 27, 2009 and haulroads) are not included when determining major stationary source applicability. The facility's potential to emit will be 92.14TPY for PM (open storage piles constructed or modified after May 27, 2009 and point sources combined), which is less than the 45CSR14 threshold of 250 TPY for a regulated air pollutant used to define a major stationary source. Therefore, the proposed modification is not subject to the requirements set forth within 45CSR14.

TOXICITY OF NON-CRITERIA REGULATED POLLUTANTS

A toxicity analysis was not performed because the primary pollutants that will be emitted from this facility are PM (particulate matter) and PM_{10} (particulate matter less than 10 microns in diameter), which are non-toxic pollutants.

AIR QUALITY IMPACT ANALYSIS

Air dispersion modeling was not performed due to the size and location of this facility and the extent of the proposed modification. This facility is located in Raleigh County, WV, which is currently in attainment for PM (particulate matter) and PM_{10} (particulate matter less than 10 microns in diameter). This modified facility will remain a minor source as defined by 45CSR14 and 45CSR19, therefore, an air quality impact analysis is not required.

GENERAL PERMIT ELIGIBILITY

The proposed modification of this facility meets the applicability criteria (Section 2.3), siting criteria (Section 3.1) and limitations and standards (Section 5.1) as specified in General Permit G10-D.

All registered facilities under Class II General Permit G10-D are subject to Sections 1.0, 1.1, 2.0, 3.0 and 4.0.

MONITORING OF OPERATIONS

The coal processing and conveying equipment and storage areas should be observed to make sure that the facility is meeting the applicable visible emission standards of 40 CFR 60, Subpart Y. Visible emissions from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal constructed, re-constructed or modified after April 28, 2008 shall not exceed 10 percent (10%) opacity as stated in 40 CFR 60.254(b). Equipment used in the loading, unloading, and conveying operations of open storage piles are not subject to the maximum 10% opacity limitation.

The owner or operator of an open storage pile, which includes the equipment used in the loading, unloading, and conveying operations of the affected facility, constructed, reconstructed, or

Fact Sheet G10-D118D Pocahontas Coal Company LLC Affinity Preparation Plant modified after May 27, 2009, must prepare and operate in accordance with a submitted fugitive coal dust emissions control plan that is appropriate for the site conditions. The fugitive coal dust emissions control plan must identify and describe the control measures the owner or operator will use to minimize fugitive coal dust emissions from each open storage pile. The plan must be submitted to the Director prior to startup of the new, reconstructed or modified open storage pile.

RECOMMENDATION TO DIRECTOR

The information contained in this modification application indicates that compliance with all applicable regulations should be achieved when all of the proposed particulate matter control methods are in operation. Due to the location, nature of the process, and control methods proposed, adverse impacts on the surrounding area should be minimized. No comments were received during the comment period. Therefore, the granting of a General Permit G10-D registration to Pocahontas Coal Company LLC for the modification of their existing wet wash coal preparation plant located near Midway, Raleigh County, WV is hereby recommended.

Daniel P. Roberts, Engineer Trainee NSR Permitting Section

June 12, 2017

Date